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B-meson semileptonic decay form factors from highly improved staggered quarks

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We present an update for our ongoing calculation of B-meson semileptonic form factors, using the highly improved staggered quark (HISQ) action on FNAL-MILC $N_f = 2+1+1$ HISQ gauge ensembles. We compute the scalar, vector, and tensor form factors for the $B \to \pi$, $B \to K$, $B_s \to K$, and $B_{(s)} \to D_{(s)}$ transitions . We have recently added data with $a \approx 0.03$ fm into our analysis, allowing simulation directly at the physical b-quark mass.

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